Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously presented) A data processing circuit comprising:

a memory device to store data and coefficients;

at least a first functional unit to perform a n-taps polyphase filtering and a second functional unit to perform a m-taps polyphase filtering, m and n being integers greater than or equal to two, wherein the functional units are able to receive in parallel data and coefficients coming from the memory device, and to calculate results from said data and coefficients and supply these results back to the memory device; and

a crossbar to perform a transfer of the data, coefficients, and results between the memory device and any functional unit or any combination of functional units.

2. (previously presented) A data processing circuit as claimed in claim 1, wherein at least one functional unit is able to function according to a direct mode and a transposed mode, the circuit comprising control means for controlling the functioning mode of said functional unit.

3. (previously presented) A data processing circuit as claimed in claim 1, wherein at least one functional unit is also able to perform a multiplication-accumulation using two data items coming from the memory device.

4. (canceled)

5. (original) An image processing system comprising a processing circuit as claimed in claim 1.

6.   (original) A receiver decoder device for television comprising at least one image processing system as claimed in claim 5.

7.   (original) A device comprising at least one screen intended to display images and an image processing system as claimed in claim 5.

8.   (original) A communication network comprising at least one transmitter able to send signals representing at least one image, a transmission network, a receiver able to receive said signals and an image processing system as claimed in claim 5.